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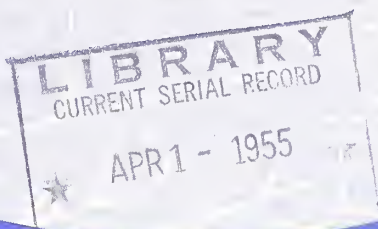
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Improving the Efficiency of
RETAIL GROCERY CLERKS
by BETTER TRAINING

MARKETING RESEARCH REPORT NO. 82

U. S. DEPARTMENT OF AGRICULTURE

Agricultural Marketing Service
Marketing Research Division

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PREFACE

This is the second in a series of reports on improving the efficiency and productivity of retail food store employees through better techniques of personnel management. These studies are part of a broad program of research on methods of increasing the efficiency of food wholesaling and retailing operations, thereby helping to hold down the costs of distributing food through these stages of the marketing system. This study is concerned with the development and evaluation of methods of instructing retail grocery clerks in improved practices.

The author had the assistance of many individuals and organizations in the retail food industry. Acknowledgment is due Wrigley's Stores, Detroit, Mich., for cooperation in the study; to John Lurie, president of Wrigley's, and Nathan W. Lurie, secretary, Andy DeKonick, sales manager, Maynard E. Biekema, personnel director, and the supervisors, managers, and personnel of the stores in which the study was conducted. Special credit is due Lee Howard, training director, for his able assistance at every stage in the conduct of the study.

Credit is also accorded Harold Riley, Michigan State College, for conducting the training conferences, and to the Super Market Institute for making available store manager guides used in the training. The study was made under the general direction of R. W. Hoecker, Head of the Wholesaling and Retailing Section, Transportation and Facilities Branch, Marketing Research Division, Agricultural Marketing Service.

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The study was made under authority of the Agricultural Marketing Act of 1946 (FMA, Title II).

Performance of retail grocery clerks may be improved considerably by carefully planned instruction. Emphasis on employee participation, when introducing improved grocery handling practices, resulted in wider acceptance of the new work methods and in improved utilization of work time, which in turn contributed to better appearance of display shelves and increased grocery sales per clerk hour.

These were the major findings in a project to determine training techniques that would produce better acceptance of improved grocery handling practices. Three methods of introducing the new practices were tested in a controlled experiment among 15 supermarkets of a moderate-sized chain.

Highlights of the three instruction methods tested are as follows:

Method A--Memoranda and published material on grocery handling were mailed to store managers for discussion and distribution to their clerks.

Method B--Store managers were called by their supervisor to a special meeting on grocery handling; they were shown a motion picture on the subject and were given copies of the memoranda and published material to discuss with and distribute to their clerks.

Method C--Store managers and their supervisor were called to a special meeting on grocery handling, were shown the motion picture, and were given the published material on the subject. Grocery handling practices were discussed with the clerks in the stores and at a conference in the company's office. The clerks were shown the motion picture and received copies of the memoranda.

The following results were achieved by each method of instruction:

Improved instruction on grocery handling practices and time utilization was directly related to increased grocery sales per clerk hour. The improvement was evidenced particularly in stores where clerk participation was emphasized (instruction method C); in these stores, sales per clerk hour rose \$4.96. In stores where managers met with their supervisors (instruction method B), the gain was \$3.47 per clerk hour. Instruction method A was followed by a gain of \$1.33 in sales per clerk hour.

Assuming that the average of grocery sales per clerk-hour before instruction was *normal* for the stores studied, the rate of sales per hour after instruction indicates a possibility for considerable savings in man-hours, especially under instruction methods B and C. If 50 percent of the projected man-hour savings were realized from the instruction methods used, then method C indicated a possible saving of clerk-hours representing \$283 a week for the group of five stores. Instruction in which the supervisor met with store managers but left clerk training to the managers was followed by estimated savings in clerk cost of about \$161 a week for the second group of five stores. The instruction method which relied on memoranda and printed material sent to store managers was accompanied by hourly savings representing about \$72 a week for this group of five stores. Costs of instruction, which were relatively minor, were not subtracted from these savings figures.

Utilization of working time by grocery clerks also was improved by more effective methods of instruction. Nonproductive time was reduced, and the proportion of time spent both on customer service activities and on *other* store work was increased.

Better utilization of working time by clerks, particularly those under instruction method C, was reflected in improved appearance of display shelves. Appearance of shelves was rated *excellent*, *fair*, and *poor* on periodic visits to the stores before and after instruction. Ratings of *excellent* for stores where instruction method C was used rose from 58 to 85 percent; for stores where instruction method B was tested, ratings of *excellent* rose from 42 to 54 percent; the proportion of *excellent* ratings remained substantially unchanged for stores where method A was used.

Adherence to the recommended grocery handling practices was increased by more effective methods of instruction. An average of the performance of four basic grocery handling operations gave the following results: Among full-time day and night clerks participating in the program to improve work practices (method C) correct performances increased an average of 26.8 percent; among clerks whose managers met with their supervisors (method B) correct performances were improved by 8.5 percent; and among clerks whose managers received only written material (method A) correct performances averaged 13.1 percent higher. (There was some transference of information among night crews of A stores and C stores which probably accounts for the apparently better results with clerks under instruction method A compared to those under instruction method B.)

The study showed that, while any one of the instruction methods commonly used in supermarket organizations and tested in the experiment helped to improve clerk performance, there was considerable difference in the effectiveness of the methods. Instruction that emphasized clerk participation was more effective than either of the other methods tested.

Overhead costs of a work improvement program in developing better work practices and training materials are about the same for any method of instruction. Thus, the principal difference between the methods tested was the additional cost of getting grocery clerks to participate in the program under instruction method C. This was accomplished by periodic visits to the store to discuss grocery handling practices with individual daytime and nighttime clerks and by a conference with them in the company's offices.

The cost of conducting a program to improve work practices by instruction method C is estimated at \$6 per clerk more than by instruction method B, and somewhat more than that as compared with instruction method A. Results of the study indicate that the most effective method of instruction more than pays for itself in reduced operating costs.

Although the study was conducted in one supermarket organization of moderate size, the findings are applicable for large or small organizations. Employee participation can be developed for all store personnel, departmental personnel in a group of stores, or personnel in one region of a supermarket chain.

Although the results indicated the importance of securing active employee participation, the study showed that an effective program of work improvement should also include (1) evidence of top management interest in improved work methods, (2) dramatization of the program to command the interest and enthusiasm of the clerks, and (3) continuity and follow-up.

IMPROVING THE EFFICIENCY OF RETAIL GROCERY CLERKS BY BETTER TRAINING

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INTRODUCTION

Although great advances have been made in introducing labor-saving devices and practices in retail food stores during recent years, labor continues to be the principal cost item (other than merchandise) in this important segment of the food marketing system. Therefore, measures that further increase the productivity of people engaged in food retailing are important factors in holding down the overall cost of food distribution. In the long run, savings in operating costs at the retail level benefit farmers and consumers as well as retailers.

Employee productivity in retail food stores is affected by four factors: (1) The facilities and equipment; (2) the work methods; (3) the employees' skill; and (4) the employees' motivation or will to make effective use of the equipment and methods provided for them. The kind of instruction is important in developing skill and motivation.

Informing a new employee on the rudiments of a food retailing operation and improving the performance of employees who are on the job are both problems of training. Thus instruction given when the grocery clerk is first hired may continue as long as he is on the job. At any given time, the principal training problem for most food retailers is how to improve the performance of current employees. Efforts to improve performance usually require that the clerk use a better work method in place of a less efficient one. The problem of overcoming resistance to change from old to improved methods is a central concern of this study.

Often, managers of retail food stores to whom the responsibility for training employees is delegated have had little training in the most effective methods of instructing and motivating employees. Some commonly used methods of introducing new procedures to grocery clerks are evaluated in this study in order to help food retailers to develop effective programs for increasing employee acceptance of better work practices. 1/

1/ In recent years, an increasing number of studies have been made, particularly in manufacturing industries, on the subjects of effective employee relations and methods of instruction. Of particular interest in connection with this report on introducing new work practices to grocery clerks is a report, *Administering Changes*, by Harriet Ronken and Paul Lawrence (Harvard University Press, 1952), on the human relations aspects of the problem in a typical factory. Harvard University's School of Business Administration and Michigan University's Institute of Social Research are carrying on broad programs of research on human relations in business organizations. The National Industrial Conference Board and others have examined incentive programs, job preferences, and other factors which might bear on employee motivation.

Grocery clerks were selected for this study because they account for a substantial part of the total man-hours in self-service food stores. No attempt was made to introduce new equipment, or to effect changes in store structure, in store personnel, in wages, or in working conditions. The improved work methods suggested as part of this study were limited to those that were in keeping with the current working conditions and existing facilities of the stores. The study was made in three matched groups of five stores each in a midwestern supermarket chain. (Procedures followed in conducting the study are described in the Appendix.)

METHODS TESTED FOR INTRODUCING IMPROVED PROCEDURES

Discussions with a score of supermarket operators across the country disclosed that there are two principal methods employed in introducing improved operating procedures to grocery clerks.

The most common method is to place responsibility in the hands of the store or grocery managers. To help them instruct their clerks, management sometimes provides the managers with memoranda and with material prepared by trade associations, manufacturers, and others for use by the retail food industry generally. There are considerable differences in how much emphasis top management places on managers' use of material made available to them.

To test the relative effectiveness of this commonly used method, the grocery clerks of five supermarkets (referred to in this report as A stores) were designated for instruction as follows: Managers of the five stores received by mail several memoranda, together with two manager guides, specifically designed to help store managers improve their grocery handling operations. Manager guides and the memoranda supplemented each other, and consisted of the following:

1. Memorandum to managers, *Improving Some Grocery Operations*
2. Memoranda for grocery clerks 2/
 - a. *Ideas to Help you Work Smarter - Not Harder*
 - b. *There's More to Your Job...*
3. Store Manager Guides 2/
 - a. *Receiving and Handling Groceries in the Store Room*
 - b. *Moving Groceries from the Store Room to the Selling Shelves*

A letter, over the signature of the company's sales manager, requested the store managers to review the material with their assistants and distribute the memoranda to their grocery clerks. Each manager received enough copies of the memoranda addressed to the clerks so that every clerk could have a personal copy. The material sent to the store managers was previously discussed with their store supervisors. The method of distribution also was discussed and agreed upon. This method of instruction, tested in group A supermarkets, is referred to in this report as *instruction with printed material* and *instruction method 'A'*.

2/ These memoranda were prepared for use in the study, in cooperation with the company in which they were employed. Copies of the memoranda may be obtained from the Transportation and Facilities Branch, Agricultural Marketing Service, U. S. Department of Agriculture, Washington 25, D. C. The Store Manager Guides (published by the Super Market Institute, Chicago, Ill.) were used as a good example of published training material. The Guides are a monthly publication addressed to the store manager level; they present ideas for improving store operations with illustrations and simple, non-technical text.

The second common method of introducing improved grocery handling practices, employed in larger organizations, is to place responsibility in the hands of each store supervisor, who is usually in charge of a group of 5 to 10 stores. Under this arrangement, the supervisor relays the information and materials about improved operating procedures to the store managers in the course of a periodic meeting (usually held weekly) in which all phases of grocery operations are likely to be discussed. The emphasis given to any particular recommendation for increasing efficiency in grocery handling depends upon the interest of the individual supervisor and the number of other topics which he needs to cover during the meeting.

To test the relative effectiveness of this method of introducing improved grocery handling procedures, a group of five stores, comparable with the group A stores, was selected (referred to in this report as B stores) and the following training procedures were utilized: The memoranda and printed material made available to the group of A stores were discussed with the supervisor of the second group of stores. The supervisor conducted a special meeting of store managers on grocery handling, which lasted about 1½ hours. At the meeting he distributed copies of the memoranda and the Store Manager Guides. He also showed a motion picture, developed in cooperation with the company to illustrate current and improved grocery handling practices. ^{3/} He urged the managers to use as many of the suggestions as seemed applicable to their stores and to discuss the material with their assistants and to distribute copies of the memoranda to their day and night clerks. This method of instruction, tested in the B group of supermarkets, is referred to in the report as *instruction with supervisor meeting* and *instruction method 'B'* (fig. 1).

A third method of introducing improved operating procedures, used by some supermarket organizations, was tested in this study. Although there are many variations of this approach, its emphasis is on obtaining the participation and cooperation of the grocery clerks as well as the store and grocery managers. A third group of five stores, comparable to the A and B groups, was selected for testing this approach (these are designated in this report as C stores). This method of instruction was developed in the study as follows:

Managers and their assistants in the five C stores attended a conference in which tentative ideas on improving grocery handling operations were discussed and plans made for conveying the information to their clerks. During the meeting, the motion picture on grocery handling was shown to the managers for comment. The two Store Manager Guides were distributed to the managers at this meeting, but there was no discussion of the guides. The meeting was conducted by a trainer who was not associated with the company; the store supervisor sat by and participated in the same way as the store managers. Although the managers were invited to attend meetings of their clerks (which they agreed should be held), no special effort was made to have them follow through on the improved work methods.

^{3/} This motion picture is the property of the cooperating company and is not available for general distribution. It was made by a professional photographer but was staged by company personnel at a cost of less than \$100. Further information about the motion picture may be obtained from the Transportation and Facilities Branch, Agricultural Marketing Service, U. S. Department of Agriculture, Washington 25, D. C.

METHODS OF INSTRUCTION TESTED BY RETAIL GROCERY CLERKS

INSTRUCTION METHOD "A"

PRINTED MATERIAL TO MANAGERS
(8 CLERKS) ✓



INSTRUCTION METHOD "B"



SUPERVISOR MEETING WITH MANAGERS

+

MOTION PICTURE FOR MANAGERS

+

PRINTED MATERIAL TO MANAGERS
(8 CLERKS) ✓

INSTRUCTION METHOD "C"

CLERK DISCUSSIONS ON IMPROVED WORK METHODS

+

TRAINER MEETINGS WITH MANAGERS & CLERKS

+

MOTION PICTURE FOR MANAGERS & CLERKS

+

PRINTED MATERIAL TO MANAGERS & CLERKS

✓ MANAGERS INSTRUCTED TO GIVE MATERIAL TO THEIR CLERKS



Figure 1.

Instruction for the clerks was highlighted by special meetings called for both daytime and nighttime employees. These meetings were conducted by a trainer who was not associated with the company, and not all of the C store managers or their assistants attended. Instruction was dramatized by the preparation and showing of the motion picture on grocery handling in which some of the clerks present were themselves the principal actors.

Participation by the grocery clerks was facilitated by informal discussion with them at the stores, from time to time, over a period of four weeks before the scheduled conferences. In these informal discussions, some of the current and improved grocery handling practices were discussed and evaluated with the clerks. The conferences with the grocery clerks also were designed to obtain their participation. ^{4/} The memoranda addressed to the clerks, mentioned previously, were distributed to the clerks in the C stores at the conclusion of the meetings.

Two elements of training were introduced in all the stores by the research work itself. These elements were: (1) Manifestations of management interest in improving performance of clerks, and (2) close scrutiny by the researchers of the work being done by the clerks. Management interest was evidenced initially by calling all managers together to tell them about the cooperative study being undertaken with the United States Department of Agriculture on the subject of grocery handling. This interest was reaffirmed by the recurrent appearance of people conducting the study in each of the stores. Close scrutiny of the work done by grocery clerks was implied by the observations, which probably served as a follow-up to the instruction that the managers and the clerks had received. These elements of training were the same for all stores. Their likely effect was to raise performance of clerks in all stores somewhat above that which might have been anticipated on the basis of the instruction given in each case.

The important distinction, therefore, between methods A and B was the greater effort to instruct managers of the B stores; and the important difference between the A and B methods and the C method was the effort made to have the C store clerks participate in the program to improve work methods. Thus, the relative differences in performance of clerks reported after tests of the different methods of instruction can be attributed, in large part, to these basic differences in the approaches to the problem of introducing improved work practices.

RESULTS OF INTRODUCING IMPROVED WORK PRACTICES TO LAYTIME GROCERY CLERKS

Despite the specialization which prevails in modern self-service food stores, grocery clerks have a wide variety of tasks in food retailing. Their basic job is to

^{4/} For example, in presenting the motion picture on grocery handling, current practices were shown first and the clerks were asked to comment on any observable inefficiencies. After a discussion on the shortcomings of current practices, the improved practices were shown and comments were requested on the observed differences. See Appendix for an outline of the conferences with clerks in the C group of stores.

price-mark merchandise and place it on display shelves, seeing that the shelves are well stocked. However, besides this principal task, the clerks are responsible for unloading groceries from delivery trucks and placing the merchandise within the storeroom, and they act as carry-out boys, porters, special display men, backroom watchmen, and, in some stores, as cashiers, when necessary.

The people employed as grocery clerks are typically in their late teens or in their early twenties, and frequently have less than a complete high school education. Many people hired as grocery clerks begin with little or no previous work experience, either in food stores or in any other occupation. Often, they begin work as grocery clerks without having a long-term interest in food retailing.

In most of the food stores studied, part-time employees account for a large proportion of the total grocery clerk hours. These employees are usually high school students who work several hours each day after school, one or more evenings, and all day Saturday. The turnover is high among grocery clerks, but particularly high among the part-time employees. Thus the cost of apprentice training is high in relation to the total productive time that many clerks are likely to spend with the company.

In most self-service supermarkets, supervision of daytime grocery clerks is the responsibility of the store manager or his assistant. Frequently, the store manager has so many other things to do that he can give little instruction or supervision to his clerks. Most clerks are given assignments without being instructed on how the task is to be done. It is assumed that they will apply commonsense to the job or will learn from one of the experienced clerks.

Acceptance of Improved Grocery Handling Practices by Day Clerks

The recommendations for daytime grocery clerks made as part of this study were principally directed at the basic task of putting up merchandise. The memoranda addressed to the daytime clerks also included some points on how to receive goods and bring out merchandise for stocking by night clerks (a night crew was employed in most of the company's stores). The four operations of case cutting, price-marking, putting up merchandise, and disposing of cartons are used in this study as an index of how well the clerks followed recommended work methods. While other factors, for example, operations connected with receiving merchandise, might also be used, it was assumed that the four grocery operations would fairly represent a clerk's performance. Any other index of grocery clerk acceptance of recommended practices probably would show similar results.

Method A: Instruction with Printed Material

As noted previously, under instruction method A, memoranda and manager guides describing improved work methods were mailed to store managers. To learn how the material had been used, managers and their assistants in these five stores were interviewed three months later. Three of the five managers remembered the material, and two of the assistant managers remembered receiving the material from their managers. Only one of the managers remembered specifically discussing the material with his grocery clerks; none of the assistants remembered doing so. Nonetheless, some may have discussed grocery handling methods with their clerks even though, three months later, they did not remember giving them the material.

Observations of the manner in which the four grocery handling operations were performed indicated some increase in correct performances among clerks under instruction method A. 5/ For full-time grocery clerks in the A group of stores, the operations of case cutting, price-marking, putting up merchandise, and disposing of cartons had been correctly performed 44.1 percent of the times before instruction. During a 6-week period after the material had been sent to the managers, the proportion of correct performances of these four operations had risen to 59.1 percent. Thus, there was an increase in correct performances of 15 percentage points (table 1).

Table 1.--Proportion of operations correctly performed by full-time day grocery clerks in 15 supermarkets, by method of instruction and operation performed, 1953 1/

Operations performed	Proportion of operations correctly performed in 5 stores with each instruction method					
	Method A		Method B		Method C	
	Before	After	Before	After	Before	After
	Percent	Percent	Percent	Percent	Percent	Percent
Cutting cases	9.4	16.7	7.0	14.3	2.3	32.5
Price-marking merchandise . .	66.6	79.4	66.7	73.9	32.5	78.0
Stocking merchandise	45.7	57.8	30.5	52.2	54.1	52.2
Disposing of cartons	54.6	82.5	40.0	64.9	68.5	72.7
Average	44.1	59.1	36.0	51.3	39.4	58.8
	Number	Number	Number	Number	Number	Number
Clerks observed	12	12	13	13	13	13
Observations made 2/	241	147	177	141	136	216

1/ These were full-time clerks who were available for instruction. These data are based on a 6-week period before and a 6-week period after the date of instruction.

2/ See Appendix for procedures used in making observations.

The improved performance noted for the group of A stores may be attributed in part to the efforts made by managers and their assistants in some of the stores. As indicated previously, however, awareness that their work was being closely followed may have resulted in a self-consciousness about work methods and hence may have contributed to a more nearly correct performance. The magnitude of improvement suggests that many clerks probably knew correct methods even though they did not customarily follow them.

5/ See the Appendix for a discussion of how observations were made to determine the extent to which the operations were correctly performed. Detailed data on the performance of the operations as recommended is shown in Appendix table 11.

Method B: Instruction with Supervisor Meeting

To learn how the material on grocery handling was communicated to employees under instruction method *B*, managers and their assistants were interviewed three months after the meeting of managers with their supervisors. All managers recalled the meeting and they and their assistants remembered the material which they had received. In most cases, the manager or his assistant reported he had taken the subject up with his daytime grocery clerks.

Average performance of the four grocery handling operations by full-time grocery clerks under instruction method *B* had been correct 36 percent of the time before instruction. The proportion of correct performances rose to 51.3 percent during a 6-week period after instruction (table 1). This represents an improvement of 15.3 percentage points.

Improved performance among clerks whose managers were instructed at a supervisors' meeting can be attributed to the same reasons as those noted for *A* store clerks. It appears that the method of instructing store managers in improved work methods had little effect on how faithfully the grocery clerks followed the work methods recommended. Some store managers in the group of *B* stores commented, on being interviewed, that the clerks did not want to try better ways of doing the work.

Method C: Instruction with Clerk Participation

Managers and their assistants in the group of *C* stores made no greater effort than the *B* store managers to win employee acceptance of the better work methods. However, as previously indicated, responsibility for instruction under method *C* was not left solely with the managers.

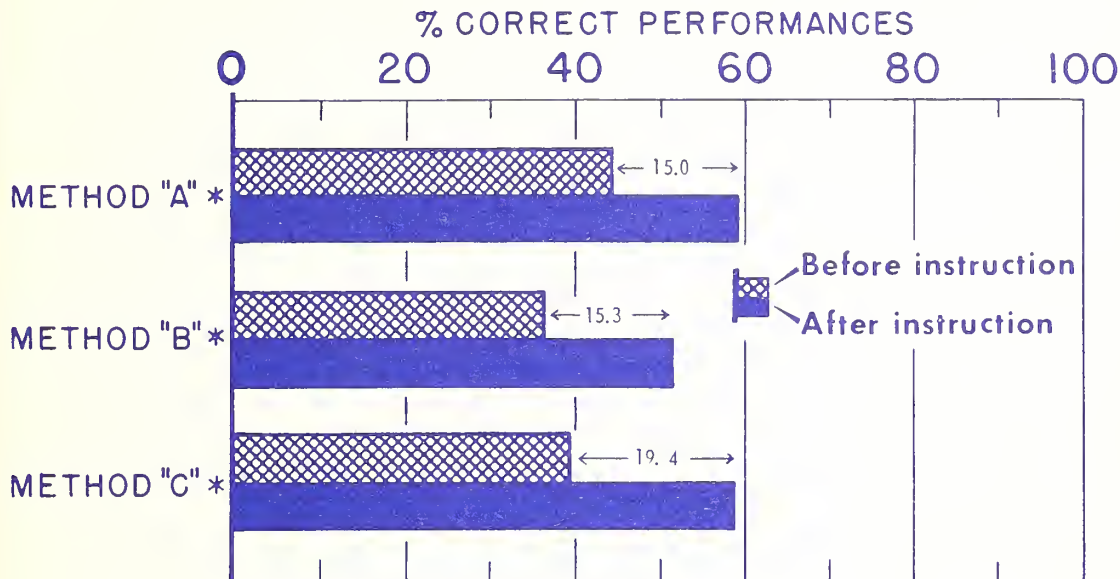
Observations in *C* stores prior to instruction indicated that the four operations were correctly performed by full-time day grocery clerks 39.4 percent of the time. During the 6 weeks after instruction, correct performances in the *C* group averaged 58.8 percent. Thus, there was an increase in correct performances of 19.4 percentage points above the preinstruction levels (fig. 2). Although the proportion of correct performances thus increased more among *C* store clerks than either the *A* or *B* groups, this difference, taken by itself, may not be significant. However, viewed in relation to findings discussed in subsequent sections of this report, the somewhat greater improvement recorded for *C* store clerks may be attributed, in part, to the method of instruction used.

The most marked increase in correct performances by clerks participating in the work improvement program, as compared to clerks instructed in the other ways tested, was made in cutting cases (table 1). Correct performance, in this instance, required the clerk to alter his habitual method of doing the task and to adopt another method, which, initially, was likely to be more awkward and time-consuming. ^{6/} Unless the clerk fully

^{6/} The usual method of cutting cases was to cut one side and then turn the case to cut the next side, turning the case three times to cut the four sides. The improved method was to cut the case without turning it, by cutting three sides from a fixed position, then turning the flap and cutting the fourth side.

Full-time Day Clerks

IMPROVEMENT IN GROCERY CLERK PERFORMANCE



* SEE FIGURE 1 FOR EXPLANATION OF INSTRUCTION METHODS

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Figure 2.--Comparative percentages in which four grocery handling operations were correctly performed, by method of instruction, for full-time day clerks.

understood the new method and was adequately motivated, he was likely to resist changing his way of performing the operation. The performance of clerks in C stores in this connection, as contrasted with that of clerks instructed by A or B methods, illustrates the value of participation in overcoming resistance to new practices.

Utilization of Working Time by Day Clerks

Retail food store operators often comment that, even after efficiencies in grocery handling operations are introduced, there is not an immediate reduction in grocery clerk hours or a lowering of operating costs. The probable reason is that clerks are employed the same number of hours after efficiencies are introduced, and little effort is made to see that the clerk hours saved are employed productively in other store work.

The memoranda addressed to the clerks, as part of the study, suggested tasks that the day clerks might do to utilize their working time more fully and effectively. In order to determine if grocery clerks followed these suggestions and productively spent any time saved by doing their basic tasks more efficiently, systematic observations were made over a period of 6 weeks before instruction and 6 weeks afterward on how grocery clerks spent their work days. Table 2 summarizes the data.

Table 2.--Proportion of working time spent in specified activities by part-time and full-time day grocery clerks in 15 supermarkets, by method of instruction, 1953 ^{1/}

Activities	Proportion of time spent in 5 stores with each instruction method					
	Method A		Method B		Method C	
	Before	After	Before	After	Before	After
	Percent	Percent	Percent	Percent	Percent	Percent
Backroom operations:						
1. Receiving goods from trucks.	5.5	6.8	3.1	5.1	4.5	3.7
2. Handling cases in backroom.	11.9	14.9	13.7	11.3	9.4	12.2
3. Other backroom work.	9.4	4.4	4.3	3.2	8.1	6.0
4. In work delay (avoidable delays)	4.4	3.9	3.1	3.1	7.4	2.7
Store operations:						
5. Transporting cases to and from backroom.	6.0	6.6	7.6	5.2	4.1	7.2
6. Opening cases, pricing, putting up merchandise.	32.4	33.4	31.4	36.2	32.9	35.2
7. Other store work	7.3	9.7	8.6	9.8	9.7	11.2
8. Housekeeping	3.3	2.1	4.2	4.1	3.6	1.6
9. In work delay (avoidable delays)	7.9	3.8	3.9	2.0	7.5	2.6
Other activities:						
10. Work at check stand	8.0	8.4	14.2	15.4	6.4	11.5
11. Other customer service.	1.3	2.3	1.8	2.9	1.6	3.3
Activities not classified	2.6	3.7	4.1	1.7	4.8	2.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
	Number	Number	Number	Number	Number	Number
Observations ^{2/}	1,913	1,397	1,254	1,643	1,353	1,886

^{1/} Data are based on observations during a 6-week period before and a 6-week period after the date of instruction.

^{2/} See Appendix for procedures used in making observations.

The amount of time falling under the category of *avoidable delays* (lines 4 and 9, table 2) was reduced considerably in all three groups of stores after instruction. ^{7/} Reductions in *avoidable delays* were evidenced in backroom operations as well as store operations, with the greatest gains being shown in the C group of stores. This suggests that the instruction, and the observations connected with the study, made the grocery clerks more aware of how they performed their work and contributed to a reduction in waste time and motion.

An increased proportion of time was spent in opening cases, price-marking, and putting up merchandise (line 6) in the period after instruction. This does not mean that these operations were done more slowly, but rather that a larger proportion of the work-day was spent on these tasks. Apparently, the nonproductive or ineffectual time saved was spent, in part, putting up merchandise.

After instruction an increased amount of time was also available for customer service, particularly among C stores, and for store work other than stocking display shelves. In these *other work categories* clerks in the group of C stores gained the most time. These were probably the most important shifts in the clerks' working day. The changes suggest that the clerks were spending more of their time in customer service activities and that work was being done which was not done before.

RESULTS OF INTRODUCING IMPROVED WORK PRACTICES TO NIGHT-CREW GROCERY CLERKS

In stores included in this study, merchandise was brought from the storeroom and placed on display largely by grocery clerks employed especially to do the work during the night. These clerks arrived for work just before the store closed and most of them remained until the task was completed and the store was ready for business the next morning.

Night crews in the stores studied were under the direction of the store managers, although a supervisor visited the stores periodically through the night. Since the characteristics of the night-crew grocery clerks were similar to those of daytime clerks, (that is, most were relatively youthful and inexperienced, and had no long-run interest in food retailing) supervision by one of the night clerks was not considered feasible in most cases. Salaries of night-crew clerks in a particular store were on the payroll of that store, and it was the store manager who assigned any special work that needed to be done during the night. However, just before closing, the store managers usually were preoccupied with many other tasks and problems and were able to give night crews little attention.

Stocking merchandise at night is a routine operation, uninterrupted by customers or salesmen, and unvaried by the assorted tasks which make up part of the work of daytime clerks. In the stores studied, the principal tasks of the night crews were to price-mark

^{7/} *Avoidable delays* meant any delay in the work which the clerk might have avoided by better planning of his work, organizing his work materials better, and by better organization of a work crew so that one clerk would not need to wait for another clerk to do a preceding operation.

merchandise (which had been set out on the floor by the daytime clerks before leaving), and to put on display as much of the merchandise as shelf space permitted.

Acceptance of Improved Grocery Handling Practices
by Night Clerks

Improved work methods recommended for night clerks were concerned principally with the tasks of cutting cases, price-marking the merchandise, putting the goods on display shelves, and disposing of cartons and cardboard after the merchandise had been placed on the shelves.

Instruction Methods A and B

The method of instructing night clerks was similar in both A and B groups of stores despite the different approaches used in getting the material across to the store managers. Managers and assistant managers of the A and B stores were interviewed three months after they had received instruction material, and none of them reported discussing the material with the night supervisors who covered their respective stores.

Only one manager among the A stores and one among the B stores said they had made a special effort to make the material available to their night crews. ^{8/} In both cases they reported calling the night clerks together one evening before work was begun and telling them about the improved work methods. Memoranda prepared for the clerks were not distributed to them. (A separate analysis of the night clerks in these two stores indicated varied reception by individual clerks but an overall performance which was little better than that of night clerks in the other A and B stores.) Thus, the manner in which the material was presented to managers under instruction method A or B had no apparent effect on the way in which they instructed their night crews.

Although an effort was made to keep each method of instruction separate and unaffected by the others, one exception occurred. There was a close and friendly relationship between the night supervisors of the A and C stores. They worked in overlapping territories and from time to time the supervisors visited each other's stores. Moreover, some of the night-crew clerks who had participated in work improvement program C were on friendly terms with some of the clerks in the A group. On being interviewed, the supervisors indicated that they discussed their work, but the supervisor of night crews in the C stores reported he had made no specific reference to the program of instruction for his night clerks. ^{9/} Nevertheless, one may assume that there was some transference of information. This probably was reflected in somewhat better acceptance of the recommended practices among night clerks in the A group of stores as compared to the B group.

^{8/} One A and one B store did not operate a night crew during the period of the study.

^{9/} The supervisor of the B group of stores covered a territory considerably removed from the group of A and C groups; he was not on particularly friendly terms with either of the other supervisors and did not visit their stores.

During the four weeks immediately after the instruction, performance of operations as recommended increased among clerks in both A and B groups of stores. The average performance of the four grocery handling operations by night-crew clerks before instruction was 38.5 percent correct in the A group and 44.9 percent correct among clerks in the B group. After instruction, the proportion of correct performances among clerks where method A was used was 45.2 percent and among clerks where method B was used 47.4 percent. Three months after instruction, when further observations were made, clerks in the A group showed increased adoption of the new methods while those in the B group remained virtually unchanged compared to the period before instruction (table 3).

Table 3.--Proportion of specified operations correctly performed by night-crew grocery clerks in 15 supermarkets, by method of instruction, 1953 1/

Operations performed	Proportion of operations correctly performed in 5 stores with each instruction method								
	Method A			Method B			Method C		
	Before	Immediately: 3 months		Before	Immediately: 3 months		Before	Immediately: 3 months	
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Cutting cases	8.7	5.6	17.5	12.4	3.9	2.0	19.1	43.1	41.2
Price-marking merchandise	49.5	73.4	76.0	60.9	68.2	67.3	52.5	87.6	100.0
Stocking merchandise.	31.9	47.9	62.4	53.1	63.0	60.4	40.8	64.0	85.5
Disposing of cartons.	63.8	53.9	64.3	53.1	54.6	51.8	51.8	94.6	100.0
Average.	38.5	45.2	55.0	44.9	47.4	45.4	41.0	72.3	81.7
	Number	Number	Number	Number	Number	Number	Number	Number	Number
Clerks observed	9	9	9	12	12	12	13	13	13
Observations made 2/	448	516	437	503	463	346	339	809	81

1/ These were full-time clerks available for instructions.
2/ See Appendix for procedures used in making observations.

Method C: Instruction with Clerk Participation

Managers and assistants in stores where instruction method C was tested were interviewed three months after the meeting with their clerks. Their comments indicated that they had not followed through any more effectively with their night-crews than managers who were part of instruction method A or B. Under the C method of instruction, however, the night clerks and the night supervisor were brought into the work improvement program by discussions in the stores and by participation in a conference on better work methods. These efforts were successful in gaining adoption for the new methods.

Correct performance of the four grocery handling operations increased markedly in the period after instruction where the clerks participated in the improvement program. The average score for nighttime clerks in the C group before instruction was 41 percent correct performances. This rose to 72.3 percent in the four weeks immediately afterward, and 81.7 percent three months later (table 3).

For the 6-week period observed after instruction, clerks participating in the work improvement program increased correct performances by 31.6 percent. Clerks under instruction

methods A and B gained 11.1 and 1.6 percentage points, respectively (fig. 3). (For further details see Appendix tables 12 and 13.)

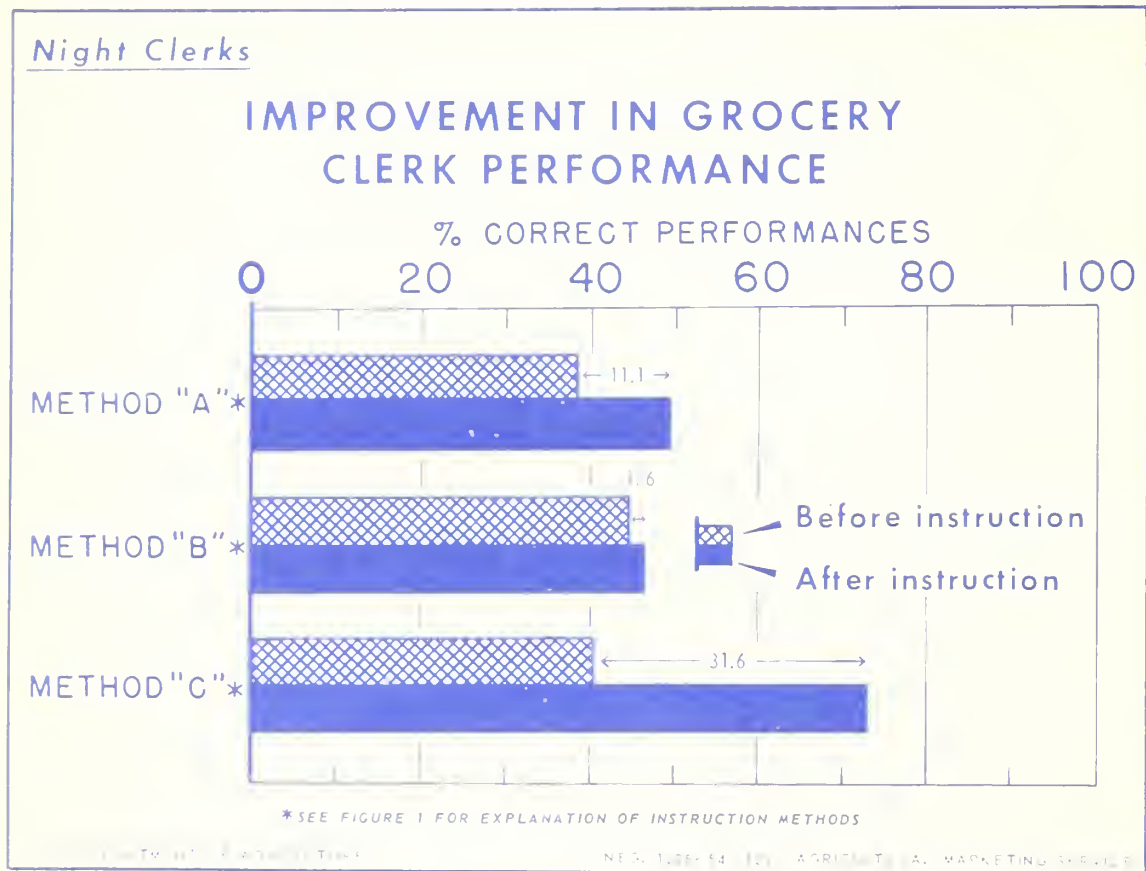


Figure 3.--Comparative percentages in which four grocery handling operations were correctly performed, by method of instruction, for night clerks.

The rapid and sustained gain in following recommended practices can be attributed largely to the method of instructing the night clerks and to the follow-up by the night supervisor. The methods used probably seemed more dramatic to and furnished greater incentive for the night employees than for the daytime employees. The night crews could hardly fail to be impressed by having people visit the stores during the night to discuss ways of making the work easier. Moreover, the conference, which was the first meeting they had attended in the main office, was probably the first evidence the night crews had that management considered them an integral part of the company.

Another factor accounting for the greater improvement among C store night crews than among the day clerks was that the instruction for the night clerks was limited to a relatively small number of key points connected with their basic job of putting up stock. These few points were more likely to become part of the work habits of the night crews because they spent much of their worktime in performing these operations.

On the other hand, procedures for putting up merchandise were only part of the material given to daytime clerks and this instruction covered only a portion of their work activities. Thus, there was less likelihood that these points would stand out and would become part of the work habits.

Time Saved by Following Improved Procedures

The study shows important time savings when grocery clerks followed the improved procedures consistently. To measure the time saved, night clerks were timed in performing the four basic operations of case cutting, price-marking, stocking merchandise, and disposing of cartons. To assure comparability, stop-watch readings were limited to the handling of cases of canned goods in packs of 24 and 48 units. ^{10/} The results are summarized in table 4.

Table 4.--Average time required by night-crew clerks to put cases of canned goods on display shelves in 15 supermarkets, by method of instruction, 1953

Size of case	5 stores with each instruction method									Cases timed in 15 markets
	Method A			Method B			Method C			
	Clerks	Cases	Average	Clerks	Cases	Average	Clerks	Cases	Average	
	ob-	timed	time	ob-	timed	time	ob-	timed	time	
	served	per	per	served	per	per	served	per	per	
	Number	Number	Minutes	Number	Number	Minutes	Number	Number	Minutes	Number
Cases of 24's	9	85	1.42	12	84	1.45	13	107	1.21	275
Cases of 48's	9	58	2.16	12	22	2.22	13	33	1.96	113
Weighted average 2/			1.63			1.67			1.43	

^{1/} The operations included in the elapsed time were: Selecting a case of canned goods, cutting the case, price-marking, shelf stocking, and disposing of cartons in the immediate work area.

^{2/} The weighted average gives a weight to cases of 24 and cases of 48 units which is proportionate to the number of times each size case was clocked in all stores during the period in which time studies were made. Cases of 24's were clocked 275 times; 48's, 113 times; the number of stop-watch readings was thus 388. Using this as 100 percent, weights of 73 and 27 were assigned to cases of 24's and 48's, respectively.

Time taken in putting up cases of 24 and 48 packs was substantially the same for clerks in both A and B instruction groups. On the other hand, clerks in the C group performed the four operations in significantly less time. The net difference between clerks in C stores and those in other stores was more than 0.2 minute per case, on the average. This means that approximately one hour would be saved in putting up 250 to 300 cases of canned goods, a normal evening's workload for a clerk. It should be borne in mind that the elapsed time recorded for putting up cases of merchandise covers the work of clerks who probably were working as efficiently as they knew how. Thus, the difference between

^{10/} The procedures used in making the elapsed-time readings are discussed in the Appendix.

the C group of clerks and clerks in other stores is measured from a relatively high level of performance. Moreover, since the recommended procedures were designed to make the work easier, it is likely that the group of C clerks would be less fatigued because they were following improved methods more consistently. This would probably be reflected in a higher level of productivity sustained through the night.

The point is often raised that the answer to better performance of grocery clerks is better clerks. Most retailers, however, need to work with the people they can get, and, in any large group of clerks, they will have some good and some poor performers. Instructing a group of clerks in better work methods may not result in good performance by every clerk, but it is likely to mean a more efficient operation by the group. In table 5, a group of clerks having a high score on following recommended work methods, after instruction, is compared with a group having low scores. The average time taken to put up cases by the group which more faithfully followed recommended practices was considerably less than that for the other group.

Table 5.--Percentage adherence to recommended practices and time taken to perform the operation by night-crew clerks, 1953

Clerks	Observations	Average performance of recommended practices	Cases timed	Average time per case ^{1/}
	Number	Percent	Number	Minutes
High score clerks:				
Clerk A	91	79.6	21	1.11
Clerk B	99	79.7	14	1.04
Clerk C	91	77.4	9	1.42
Clerk D	115	77.3	20	1.13
Average.		78.5		1.18
Low score clerks:				
Clerk E	39	33.4	17	1.52
Clerk F	68	42.9	12	1.24
Clerk G	106	41.7	8	1.48
Clerk H	66	40.2	14	1.41
Average.		39.6		1.41

^{1/} For purposes of simplicity and comparability, these averages were based on stocking cases of canned goods in 24-unit packs. Operations included in the elapsed time were: Selecting a case of canned goods, cutting the case, price-marking, shelf stocking, and disposing of cartons in the immediate work area.

It will be noted that one clerk in the group having a high score on following improved practices (clerk C) took longer to put up cases of merchandise than one clerk with a low adherence score (clerk F). This indicates that individual differences, such

as those in characteristic quickness of action, skill, and motivation, affect the time factor. Among any large group of grocery clerks there are some who characteristically move slowly and some who move more rapidly. The important point for the store manager is that the performance of his grocery clerks as a group may be improved by imparting greater skill and motivation to each individual. With effective instruction, each individual is likely to operate at a higher level of efficiency than he would without instruction, and thus do his assigned tasks with less waste effort and in a shorter time.

Utilization of Working Time by Night-Crew Clerks

Increased efficiency in performing the basic night stocking tasks means a reduction of nonproductive time and a reduction in the time taken to do the work. These savings, in turn, should be reflected in the relative amount of time spent on the basic tasks as against other work that might be done by the night crews. Table 6 indicates that such changes in time utilization by the night clerks did occur in the period after instruction.

Table 6.--Percentage of working time spent in specified activities by night-crew clerks in 15 supermarkets, by method of instruction, 1953 1/

Activities	Proportion of time spent in 5 stores with each instruction method					
	Method A		Method B		Method C	
	Before	After	Before	After	Before	After
	Percent	Percent	Percent	Percent	Percent	Percent
1. Backroom operations	0.3	0.9	0.8	2.4	1.0	
Store operations:						
2. Transporting cases to and from backroom . . .	1.8	2.5	8.0	8.5	3.0	5.2
3. Opening cases, price marking, stocking, etc. . .	70.3	78.7	72.2	73.2	66.5	69.3
4. Disposing of cardboard and housekeeping	12.7	10.3	8.6	8.3	12.2	11.4
5. Other store work.	1.7	2.7	3.2	4.8	6.1	11.9
6. In work delay (avoidable delays)	13.2	4.9	7.2	2.8	11.2	2.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
	Number	Number	Number	Number	Number	Number
Observations <u>2/</u>	660	619	851	1,126	724	668

1/ Data based on observations during a period of 6 weeks before and a period of 4 weeks after date of instruction.

2/ See Appendix for procedures used in making observations.

There was a considerable drop in the proportion of nonproductive time under the category of *avoidable delays* (line 6, table 6). Although this occurred in each group of stores, the decline in nonproductive time was greatest in stores where instruction method C was used. This decline was attended by an important increase in the proportion of time spent in *other store work* by the clerks instructed under method C. There was little increase in *other store work* among night clerks instructed under methods A or B.

The nonproductive time saved, particularly in C stores, is reflected in a greater proportion of time spent in other store activities such as leveling displays, cleaning, and, on occasion, realigning entire gondolas, tasks which would otherwise be done by day-time clerks (or left undone). The results of increased activity of this kind meant improved store appearance, as noted on page 23.

The proportion of time devoted to basic work such as opening cases and price marking increased somewhat after instruction (line 3, table 6). However, as indicated previously, this may not mean that these tasks were performed more slowly. It is more likely that the nonproductive time saved in the stores was available for the basic job of stocking merchandise. Thus, the proportionate amount of time devoted to the basic tasks would be the same or even higher than before instruction.

RELATIONSHIP OF SUPERVISION TO GROCERY CLERK PERFORMANCE

Some of the store managers who had attended the grocery handling meeting called by their supervisors (instruction method B) did not try to communicate to their clerks the information on improved work methods. Also, some store managers whose clerks participated in the work improvement program (instruction method C) did not exercise effective supervision in the period after instruction. The views of the store managers and their assistants on effective employee relations influenced the way they handled the material on improved work methods.

Store managers and their assistants were asked how important they considered good relations with their employees. Their views on how to obtain optimum productivity from their grocery clerks also were obtained. An index of employee-mindedness obtained from their responses shows that managers who thought good relations with employees very important did a good job of follow-through on the instruction for their clerks. For example, in every case where a manager, or his assistant, attained a high score on the index of employee-mindedness, he also reported concrete activity to get his clerks to adopt the recommended practices. This occurred whether the manager was part of the A, B, or C method of instruction. ¹¹ On the other hand, managers with low scores on the index of employee-mindedness had made relatively little effort to introduce or to reinforce the material made available for their clerks.

Action or inaction by managers and supervisors influenced grocery clerks in their acceptance or rejection of improved work methods. For example, under method C, the night

¹¹ There was no essential difference in the views on employee relations of managers within the three groups of stores. In the group of stores under each method of instruction there were some managers with high scores and some with low scores on the index of employee-mindedness.

supervisor followed through on the program of instruction. This resulted in a higher acceptance and a more sustained following of recommended practices by his night clerks than was found in stores where there had been little or no supervisor activity.

Good supervision is important in the performance of poorer-than-average grocery clerks, and perhaps even more important in the performance of better-than-average employees. There are some who say that little can be done with a poor employee and that nothing needs to be done about a good employee. Evidence, as shown in table 7, indicates that good instruction can motivate both good and poor clerks to adopt improved work methods.

Table 7.--Operations correctly performed by better-than-average and poorer-than-average night-crew clerks in selected supermarkets, by method of instruction, 1953 1/

Clerks	Operations correctly performed			
	Before		After	
	instruction		instruction	
	Actual	Percentage	Actual	Percentage
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Better-than-average 1/:				
Method A:				
Clerk A	23	40.0	80	33.4
Clerk B	48	47.7	99	53.7
Clerk C	45	61.5	72	54.6
Method B:				
Clerk D	68	45.2	106	41.7
Clerk E	47	59.0	51	50.2
Clerk F	38	55.9	32	65.6
Method C:				
Clerk G	29	65.8	21	71.9
Clerk H	34	57.9	20	75.5
Clerk J	23	61.1	120	79.7
Poorer-than-average 1/:				
Method A:				
Clerk K	21	37.9	49	50.7
Clerk L	26	31.3	68	42.9
Clerk M	43	36.0	39	56.5
Clerk N	51	38.3	60	40.4
Method B:				
Clerk O	30	37.1	66	40.2
Clerk P	22	33.9	33	36.6
Clerk Q	37	41.9	45	41.5
Method C:				
Clerk R	57	38.6	91	79.6
Clerk S	75	49.2	91	77.4
Clerk T	25	47.9	115	77.3
Clerk U	37	43.4	113	64.3
Clerk V	58	42.9	60	56.0

1/ Performance ratings are based on proportion of times in which 4 basic grocery-handling operations were correctly performed during a period of 6 weeks after date of instruction. Ratings of *better* and *poorer* than average are based on performance of the 4 basic operations during a 6-week period before instruction.

Among better-than-average night-crew clerks, the kind of instruction and supervision given under methods A and B did not result in increased use of correct work methods. For four of the six night clerks in this group, the proportion of the four grocery-handling operations which were performed as recommended declined somewhat in the period after instruction. On the other hand, above-average night clerks who participated in the work improvement program, method C, achieved new high levels of correct performance.

Among poorer-than-average clerks in stores where instruction methods A and B were used, the proportion of correct performances was higher in the period after instruction. This suggests that closer attention to the work of grocery clerks who have been below average in the use of good work methods may result in an improvement. However, the extent of improvement for most grocery clerks studied in both groups of stores was relatively small, and only in a few cases could the improvement be considered significant. On the other hand, among the poorer-than-average night clerks in the C stores, every clerk studied recorded an important increase in correct performances.

It should be borne in mind that for the night clerks in the A and B stores, where instruction was left to the store managers, the most important aspect of the instruction was the evident close scrutiny given their work by the people conducting the study. Apparently, close scrutiny may improve the performance of those who have been lagging, but it may be resented by those who have been conscientiously doing their job as well as they know how. On the other hand, when observation of how the clerks did their task was viewed as part of a program in which they participated, the night clerks who had been above average in use of good work practices were motivated to do even better.

STORE-WIDE RESULTS OF INTRODUCING IMPROVED WORK PRACTICES

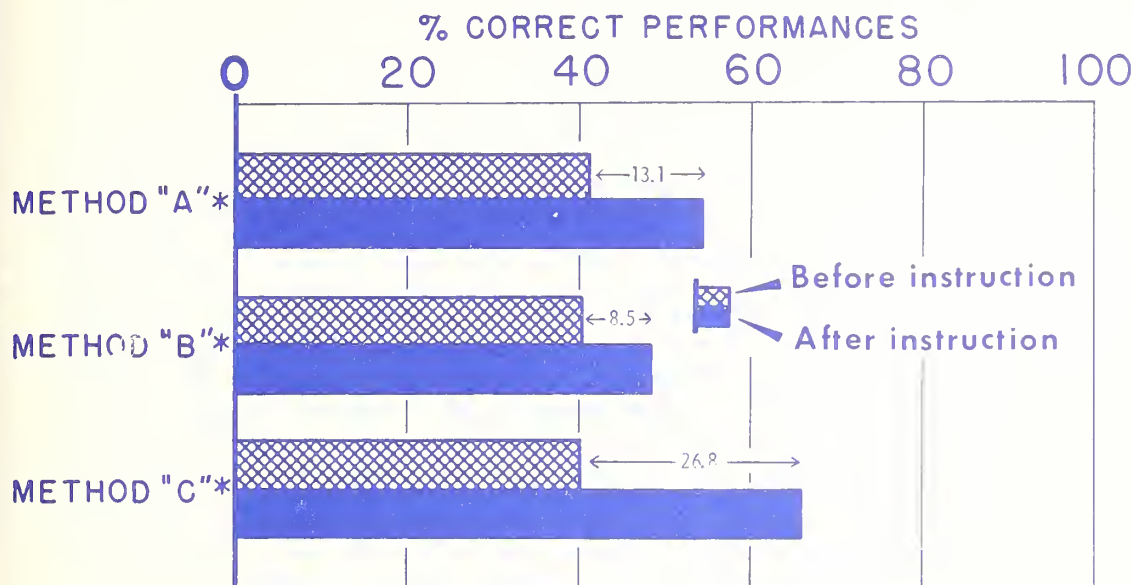
Food store managers must take into account the performance of both day and night clerks in evaluating the effectiveness of alternative methods of instruction. Two indexes were used to judge the effect of instruction on the performance of both day and night grocery clerks: (1) Their acceptance of the grocery-handling practices as recommended and (2) their utilization of working time, that is, the extent to which they reduced their nonproductive time and increased their time for *other store work* after the basic task of putting up merchandise had been accomplished. In addition, two indexes were used to evaluate the results of improved performance: (1) The extent to which appearance of display stocks was improved and (2) the ratio of grocery sales to grocery clerk hours.

Results on Acceptance of Recommended Work Practices

An average performance of the basic grocery-handling operations was computed for full-time day clerks and night clerks. In stores in which instruction method C was used, full-time day and night clerks registered an average increase of 26.8 percent in performance of the grocery-handling operations as recommended during a 6-week period after instruction. In the A stores, where managers were responsible for instruction and for distribution of the material to their clerks, the average increase in performance of recommended practices was 13.1 percentage points. In the B stores, where the supervisor conveyed the information to the managers, but where the final responsibility for instructing clerks was left to the managers, correct performances by full-time day and night clerks averaged 8.5 percentage points higher during a 6-week period after instruction than before instruction (fig. 4).

Av. Full-time Day and Night Clerks

IMPROVEMENT IN GROCERY CLERK PERFORMANCE



*SEE FIGURE 1 FOR EXPLANATION OF INSTRUCTION METHODS

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Figure 4.--Comparative percentages in which four grocery-handling operations were correctly performed, by method of instruction, for full-time day and night clerk performances averaged.

As noted in the previous section, adoption of recommended practices by night clerks in the A stores resulted partly from the close relationship between the night supervisor of those stores and the night supervisor of the stores in which instruction method C was used.

Results on Utilization of Working Time

The proportion of time which day and night grocery clerks spent on *other store work* and the time day clerks spent on service to customers increased after instruction, particularly in the group of stores where method C was used.

Before instruction, the proportion of time spent in *other store work*, such as leveling and realigning shelf displays, by day and night clerks in the group of A stores, averaged 4.5 percent of the working time. During the 6 weeks after instruction, the proportion of time available for such other work increased in these stores to 6.2 percent of the workday. In stores where instruction method B was used, the proportion of working time spent on other store work rose from 5.9 to 7.3 percent of the average workday. In stores where clerks participated in the program of work improvement, the average time spent in other store work by day and night clerks rose from 7.9 to 11.6 percent of the workday (tables 2 and 6).

A similar pattern was found in the proportion of time that day grocery clerks spent on customer service activities, such as assisting at the check stand, carrying out orders, and directing customers to merchandise sought. In the group of A stores, day clerks spent 9.3 percent of their workday in customer service activities before instruction and 10.7 percent after instruction. In the group of stores under instruction method B, customer service rose from 16 percent to 18.3 percent of the workday after instruction. In the group of C stores, day clerks spent 8 percent of their workday in customer service before instruction and 14.8 percent during the 6-week period afterward (table 2).

Time spent in store work such as leveling and realigning displays is one index of how much spare time day and night clerks have and how willing they are to use this extra time productively. Although the amount of time spent on customer service is related in part to the kind of trade served and the store manager's use of his day grocery clerks, it probably also reflects the spare time these clerks have and their awareness of the value of customer relations. Productive use of spare time and attentiveness to customers were included in the instruction given clerks in the three groups of stores. The changes that occurred in the proportion of time spent in other store work and in customer service after instruction are shown in figure 5. Among clerks in the group of C stores, the increase in time spent for these other activities was almost three times as great as among clerks under instruction methods A or B.

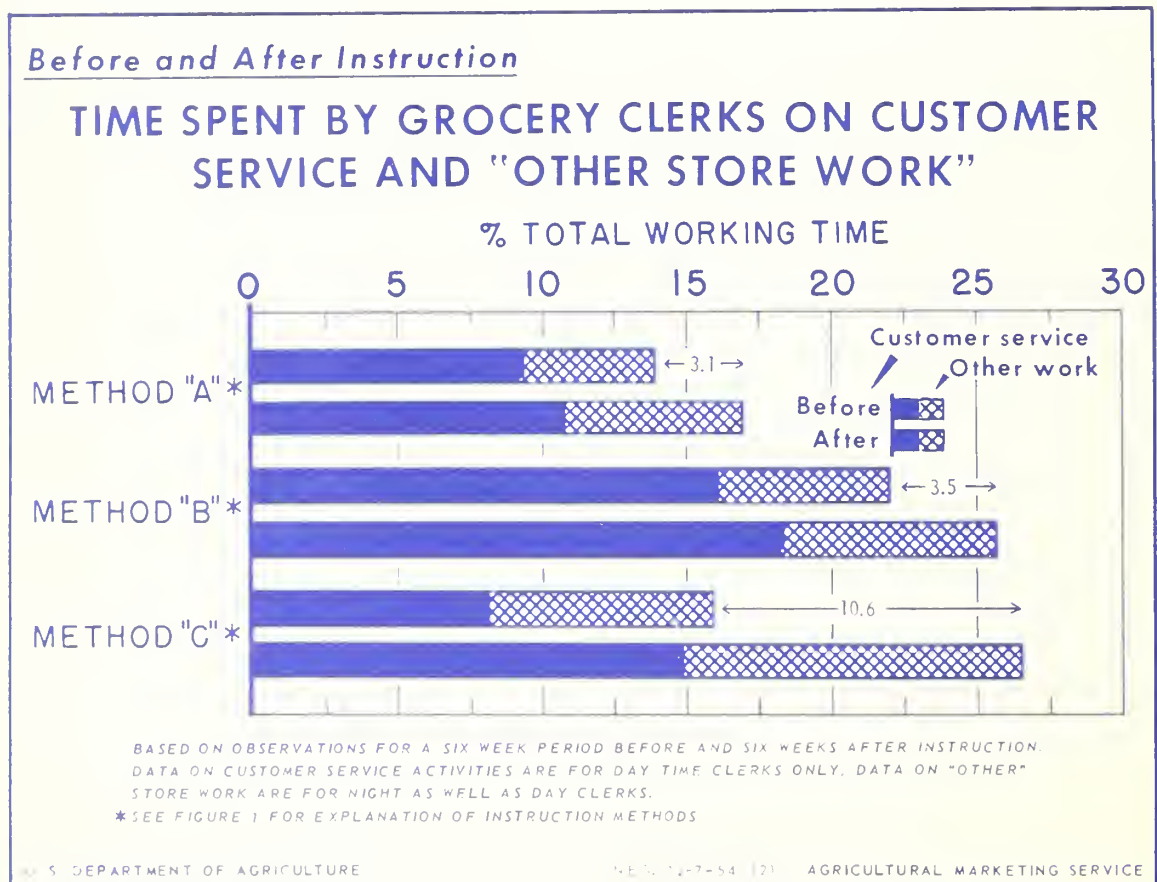


Figure 5.--Proportion of working day spent on customer service and other store work before and after instruction.

Results on Appearance of Display Stocks

The improved appearance of the display shelves showed that the grocery clerks had made good use of the increased time that the recommended methods gave them to do *other store work* (table 8). Ratings of *excellent*, *fair*, and *poor* display stock appearance were given each group of stores before and after instruction. Although ratings remained substantially the same in the A stores, there was an improvement in the ratings of the B stores, and a marked improvement in the C stores in which clerks had participated in the program. ^{12/}

Table 8.--Ratings on appearance of stock display in 15 supermarkets before and after specified methods of instruction, 1953 ^{1/}

Ratings on display stock appearance	5 stores with each instruction method					
	Method A		Method B		Method C	
	Before	After	Before	After	Before	After
	Percent	Percent	Percent	Percent	Percent	Percent
Excellent	70	69	42	54	58	85
Fair.	28	29	49	40	36	13
Poor.	2	2	9	6	6	2
Total.	100	100	100	100	100	100
	Number	Number	Number	Number	Number	Number
Ratings	47	48	48	50	53	53

^{1/} Data are based on observations during a 6-week period before and a 6-week period after the date of instruction.

Although the appearance of display stocks is dependent upon many factors, such as store fixtures, business volume, and time of day and week, these factors were substantially the same for each group of stores before and after instruction. Therefore, the difference recorded can be attributed largely to the improved utilization of time by the grocery clerks and particularly to the increased amount of time spent on *other store work*.

Results on Grocery Sales Per Clerk Hour

Another way of measuring the effectiveness of a program to improve performance of grocery clerks is to note what effect the training has had upon grocery sales per grocery-clerk hour. If the store is made more attractive, store traffic and business may increase.

^{12/} The high ratings among the group of A stores before instruction meant that improvement was likely to be difficult. However, the levels attained by the C group of stores indicate that further improvement was possible. See Appendix for procedure used in making the ratings.

And, as grocery handling tasks are accomplished more efficiently, less part-time help, which makes up a large portion of the total labor costs in grocery handling, may be needed.

Grocery sales per grocery-clerk hour increased in all three groups of stores, but particularly in the C group. In the group of stores under instruction method A, grocery sales per grocery-clerk hour increased from \$31.22 before instruction to \$32.55 afterward, a gain of \$1.33. In the stores under instruction method B, grocery sales per grocery-clerk hour rose from \$32.23 before instruction to \$35.70 afterward, a difference of \$3.47. In stores where instruction method C was used grocery sales per grocery-clerk hour rose from \$30.60 to \$35.56, a gain of \$4.96 per grocery-clerk hour (table 9).

Table 9.--Sales per grocery-clerk hour in 15 supermarkets, before and after specified methods of instruction, 1953 ^{1/}

Period	5 stores with each instruction method		
	Method A	Method B	Method C
	Dollars	Dollars	Dollars
Before instruction	31.22	32.23	30.60
After instruction.	32.55	35.70	35.56
Difference.	1.33	3.47	4.96

^{1/} Data are based on company records for a 4-week period before and a 4-week period after the date of instruction.

An improved ratio of grocery sales to grocery-clerk hours can result from an increase in business volume, a decrease in clerk hours, or both. Grocery-clerk hours were reduced in all three groups of stores in the period after instruction. However, in the group of A stores this was almost offset by a decline in business volume. In the B and C groups of stores an increased volume of grocery sales substantially improved the ratio of grocery sales to grocery-clerk hours.

The general interest in grocery handling, created as a result of the study, may have contributed to a tightening of grocery handling operations and hence a reduction of clerk hours in all three groups of stores. However, in the group of stores in which instruction method A was used, part of this reduction must be attributed to the reduced volume of business in the period after instruction. On the other hand, in stores under instruction methods B and C, clerk hours were reduced in the face of increased business volume (table 10). The reduction of clerk hours is particularly marked in stores in which the instruction included clerk participation.

In stores where training method A was tested, the ratio of grocery sales to clerk hours after instruction indicates a saving of 131 hours a week in the five stores as compared to the period before instruction. Where training method B was used, the ratio of grocery sales to clerk hours indicates a saving of 284 hours a week in the group of five stores. The difference in grocery sales per clerk hour in the C group indicates a saving of approximately 515 clerk hours a week in the five stores (table 10).

Table 10.--Weekly average sales and clerk hours in 15 supermarkets before and after specified methods of instruction, 1953 ^{1/}

Method of instruction	Sales	Clerk hours	Estimated saving in clerk hours after instruction ^{2/}
	<u>Dollars</u>	<u>Number</u>	<u>Number</u>
Method A:			
Before	103,559	3,317	
After.	100,030	3,073	
Change	-3,529	-244	131
Method B:			
Before	92,087	2,857	
After.	96,930	2,715	
Change.	4,843	-142	292
Method C:			
Before	104,027	3,399	
After.	113,353	3,188	
Change.	9,326	-211	515

^{1/} Data are based on company records for a 4-week period before and after the date of instruction.

^{2/} The estimate is computed as follows, using the group of A stores as the example:

- a. $\frac{\$103,559}{3,317}$ (grocery sales) = \$31.22 = sales per hour before instruction.
- b. $\frac{\$100,030}{31.22}$ (grocery sales) = 3,204 = number of hours that would have been required to do sales volume in period after instruction, using ratio of sales to hours before instruction.
- c. 3,204 hours - 3,073 hours = 131 estimated hours saved; difference between number of hours that would have been required and actual grocery hours spent in period after instruction.

If 50 percent of the indicated hourly savings could be realized, approximately \$283.25 in clerk salaries (at \$1.10 an hour) could be saved each week with instruction method C. For the 3-month period after instruction, during which the data were collected, this would represent a saving of \$3,684.20 for the group of five stores. Among stores in which training method A was used, on the basis of a similar percentage realized, a savings of about \$72.05 could be possible each week (or \$936.65 for the 3 months). Among stores using training method B, savings of about \$160.60 could be made each week (or \$2,087.80 for 3 months).

COSTS AND APPLICATION OF INSTRUCTION METHODS

It is difficult to compute accurately the cost of conducting programs of work improvement such as those tested in this study. There is an overhead cost in any training program. The time used to develop the improved work methods which are the basis of the instruction and to prepare the material for training is probably the largest single cost factor in such programs. The time and cost of preparing a motion picture, such as was used in the supervisor's meeting with his managers and in the meetings with clerks as part of instruction method C, is the same whether few or many people see it. If used for one or more years, the apportioned cost per clerk would be negligible.

The basic difference in cost between instruction methods A and B and method C is the time and effort taken to secure participation by the grocery clerks in the program. The cost per clerk for a program of instruction with clerk participation, as compared with the alternative methods of instruction tested, is estimated as follows: The conference with the clerks requires about two hours for each participating clerk. The time spent by a trainer in discussing the work with them and soliciting their suggestions and cooperation in the program, before the group meetings, is estimated at one-half hour per clerk per week for a period of four weeks. The cost of clerk attendance at meetings (paid for by the company) and the cost of the trainer in working with the clerks before the meeting and in leading a conference with the clerks, amount to about \$6 per clerk. Thus, the added cost of about \$6 for each of the 25 clerks participating in the work improvement program should be considered against the added saving of over 190 clerk hours each week (as compared with instruction method A) if 50 percent of the potential savings were realized.

A program to improve grocery clerk performance, such as the C method, would be applicable for small or large supermarket organizations. In the small organization a work improvement program need not be limited to a particular group of store employees but may include all store employees, each contributing his ideas for the improvement of overall store operations. In the larger organizations a program might be developed effectively on a regional or smaller territorial basis.

Techniques involved in instruction method C do not necessarily call for the services of a professional trainer. ^{13/} A comparable program to improve performance of grocery clerks could probably be worked out in most retail food store organizations in the following manner: (1) Initiate the program with a special meeting in which top management is present; (2) select an outstanding clerk to serve as assistant to the trainer or assistant to the appropriate person from management; (3) have this clerk assume the duties of talking with other clerks in the stores to enlist their participation in the program and in a conference on the subject of improved work methods in grocery handling; and (4) have this clerk lead the training conference or assist the person designated by management to conduct

^{13/} Meetings with clerks and managers were only a part of instruction techniques under method C. Moreover, leaders of the C group conferences were not particularly outstanding as trainers, and they had no authority over the clerks and managers with whom they met. The ability of the trainer to gain group participation, however, may have an important influence on the effectiveness of a particular meeting.

the meeting. Make it clear that the program to improve work methods is to be a continuous one and that at specified intervals, for example every 3 or 6 months, another clerk will be given the assignment of working with management to develop and conduct a meeting on improved work methods in grocery handling.

Results of the study indicate that an effective program for improving the performance of grocery clerks should accomplish the following: (1) Make evident management's interest in improved work methods for the group of employees concerned; (2) dramatize the program so that it will command the interest and enthusiasm of the employees for whom it has been designed; (3) enlist the active participation by the employees as well as store managers in improving their own work methods; and (4) assure continuity and follow-up. The suggestions made above for adopting such a program to the needs of the individual retail food store organization are designed to accomplish these ends.

APPENDIX

Procedures Followed in Conducting the Study

To test the effectiveness of alternative methods of instructing grocery clerks as a means of improving their performance it was necessary to (1) devise measures of grocery clerk performance and collect data in terms of such measures for a period before and after instruction; and (2) hold constant the factors, other than the method of instruction, which might affect performance.

Unlike some factory operations, that can be measured in terms of units produced per hour, no single measure is satisfactory for evaluating performance of grocery clerks. Accordingly, measures developed and used in the study to evaluate performance were as follows: (1) The extent to which recommended handling procedures were followed; (2) utilization of time during the working day; (3) appearance of display stocks; and (4) grocery sales per clerk hour. It was assumed that, although no one of these measures could give the complete picture, each was a good index of performance, and as a group they would be valid. It was further assumed that if instruction to improve performance were effective, it would be reflected in each one of these measures.

Measures of Grocery Clerk Performance

1. Following recommended grocery-handling procedures.--As part of the study, a number of specific methods of handling groceries were recommended for use by the clerks. These recommendations dealt principally with operations connected with putting merchandise on display shelves. Out of the recommendations made, four operations were selected as part of the research design to serve as an index of how faithfully clerks followed recommended practices. The four operations were (1) cutting a carton of merchandise; (2) price-marking units in the case; (3) putting the units onto the display shelf; and (4) disposing of cartons. These four operations were selected for the following reasons: First, they make up the basic tasks for which day and night grocery clerks are responsible. Second, the manner in which each of these operations were performed could readily be determined by observing the clerks at their work. Finally, a previous study on grocery handling had developed some improved methods for doing these operations that could be adapted to the stores included in the study. ^{14/} It was known, therefore, that these improved work methods were likely to be more efficient than those used previously by the clerks.

To collect data on how the operations were performed, observations were made of the clerks in all stores included in the study, for a period of 6 weeks before and after the week set aside for instruction. Each store was visited twice during the day and the night working hours. Observations were recorded on forms that listed each one of the grocery-handling operations and provided space for tallies to record the number of times each operation was performed as had been recommended. When the observer could not be certain

^{14/} Harwell, E. M., and Shaffer, Paul F. Some Improved Methods of Handling Groceries in Self-Service Retail Food Stores. U. S. Dept. Agr. Mktg. Res. Rept. 7, 118 pp., May 1952. (It should be noted that some clerks were already using some of these recommended work methods).

that the operation had been performed correctly, the tally for the observation was not counted. Similarly, when the operation could not be performed as recommended, the tally for that observation was not counted (for example, clerks were instructed to use two hands to place two units on a display shelf simultaneously, but two hands could not be used in this fashion when gallon jugs were being put on display).

The proportion of correct performances was obtained on each of the four operations--cutting cases, price marking merchandise, putting merchandise on display shelves, and disposing of cartons. The last three operations were further broken down as follows:

Price marking merchandise:

Positioning cases

Pattern stamping

Stocking merchandise:

Positioning cases

Use of two hands

Disposing of cardboard:

Placing cardboard in box

Keeping work aisle clear

The proportion of correct performances was obtained for each suboperation, and an average of the two elements was used in computing correct performance scores for each of the operations.

The grocery clerks in all the stores had been informed that observations were being made to learn how they were doing the job and not to evaluate their individual performance. They were further assured that the study was being conducted by the Department of Agriculture and that reports would be summarized by groups of clerks before the data were made available for management or industry.

To determine whether more consistent following of the recommended practices would mean that the operations could be performed in less time, stop-watch readings were made of elapsed time taken by clerks to perform the operations. The purpose of the time readings was not to develop a standard of performance, nor to determine the amount of time taken to perform each element in the operation, but rather to correlate correct performance with the time spent on the operations. Accordingly, elapsed time covered selecting a case of merchandise, cutting the case, price marking, putting merchandise on display shelves, and disposing of the carton.

To reduce variability in the elapsed time recorded and thus increase the reliability of the averages computed, time data were confined to the following: (1) Nighttime grocery clerks; (2) handling of canned goods in packs of 24 and 48 units; and (3) recordings of the complete cycle (operations which were interrupted were excluded). Time readings were taken independently by two observers. The grocery clerks were told to work at their usual

rate of speed and to perform the operations as they usually did. They were assured that the time study was not to develop production standards nor to evaluate performance of individual clerks.

2. Utilization of time during the working day.--When efficiencies in handling groceries are introduced in the stores the question arises: *What happens to the time saved by the clerks?* It was assumed that the clerks probably would be employed for substantially the same number of hours during the period after instruction as during the period before. It was also assumed that there was always a backlog of work which the clerks might do or they could spend more time in customer service activities, if time permitted. Accordingly, systematic observations were made before and after the date of instruction to determine how grocery clerks spent their time. The ratio delay technique was used in making these observations. ^{15/} Forms were designed that listed most of the tasks grocery clerks might perform during the day or night, and space was provided in which tallies could be entered for each clerk, indicating the activities in which he was engaged.

Observations were systematically made during each store visit. A tally was made for the activity in which a clerk was engaged at the time he was observed on each round of the store. Although the data do not permit an accurate estimate of the amount of time spent by the clerks on each activity, they do permit an estimate of the relative time taken for each activity. The value of the data lies in indicating shifts in the proportion of time taken to perform particular tasks before and after instruction. Thus, for example, the data permit an estimate of the amount of time saved from the basic tasks performed by grocery clerks and made available for secondary tasks that they might do when time permitted.

3. Appearance of grocery display stocks.--On each visit to the stores during the 6 weeks before and 6 weeks after instruction, the appearance of grocery display stocks was rated. Ratings of *excellent*, *fair*, and *poor* were given on the basis of the following factors: (1) Neatness of the display stocks, that is, were units neatly stacked in the shelf space allocated to the item? (2) Cleanliness of the display aisles, that is, were aisles free from sugar, flour, soap, and other merchandise *spill out*, and free from empty cartons, cardboard, or excess units of merchandise?

The tasks involved in maintaining neatness and cleanliness of grocery displays, such as leveling and facing merchandise, removing damaged merchandise, and sweeping up spillage, were usually done when the basic task of putting up merchandise was completed. Thus, better grocery display appearance was likely to be the result of the clerks having more time to do these additional tasks and being willing to spend the extra time in this productive fashion.

4. Grocery sales per grocery-clerk hour.--A basic statistic used in many supermarket organizations to evaluate operating efficiency is the ratio of sales to man-hours. A refinement of this statistic was used in the study. Grocery sales were obtained on the

^{15/} This is a tool of analysis used in industrial engineering to obtain information on how employees utilize their time and particularly on the sources for their delays in work.

basis of purchases rung up on cash registers. The number of hours grocery clerks worked each week were obtained from the company payroll cards after eliminating supervisory and most of the other help (such as cashiers and baggers) which are sometimes included under the head of grocery hours. Tabulating equipment provided the records from which the ratios were computed.

Records were obtained for a consecutive 4-week period before the date of instruction and for two 2-week periods after the date of instruction. Records for the four weeks after instruction covered sales and payroll for two weeks immediately afterward, and for another 2-week period three months later.

During the two weeks immediately after instruction, volume of sales for 2 of the 5 stores in the A group might have been adversely affected by the openings of 2 new company stores. An adjustment was made by using, as a guide, records from the 3 other A stores which were not affected; the adjusted figures are used in the report.

Holding Factors Constant Which Might Influence Grocery Clerk Performance

Each method of instruction was tested in like groups of 5 supermarkets of the company. In each group of supermarkets there was a small- and a large-volume store and 3 intermediate-volume stores. Each group of 5 stores had about the same aggregate volume and about the same number of full- and part-time employees, and the stores were located in about the same kind of shopping areas. The groups of 5 stores are used in the report as the basis for comparing the relative effectiveness of each method for introducing improved work practices. The experiment was conducted at the same time in each group of stores.

The use of groups of stores as a basis for comparison minimizes the likelihood that individual differences among store managers, their assistants, or their grocery clerks would seriously affect the results. It is likely that in each group of 5 stores there were both average and excellent store managers and also a range in the performance of grocery clerks. A fourth group of 5 stores, similar to the other 3 groups, was selected for study as a control against which changes in sales, clerk performance, and so forth, might be measured. Analysis of the data from the control group, in which no instruction was given, confirmed the validity of the several measures used in evaluating the performance of clerks in each of the 3 test groups of stores. For example, the relationship between the proportion of times in which grocery-handling operations were performed correctly and indexes of operating efficiency, such as sales per clerk hour, was similar for the control group to the relationship for the stores in the experiment.

The study's principal concern with evaluating methods of introducing improved operating procedures was not discussed with store supervisors, store managers, or clerks during the period in which the study was conducted. All were informed that the study was aimed at improving grocery-handling operations. The managers and the supervisor of one group of stores knew how the instruction was carried on in their stores, but they were not told about the methods of instruction being used in the other groups of stores. Therefore, although there may have been some communication between employees of the different stores, the effect of such communication on the study probably was held

to a minimum. One exception was the communication noted between night personnel of A and C stores.

The manner in which the study was conducted probably had some effect on the observed performance of the grocery clerks. The special meeting called by top management to introduce the study to store managers and their supervisors made evident their interest in improving grocery-handling methods. This probably made store managers more self-conscious about grocery-handling operations and may have led to stronger supervision of their grocery clerks. The effect of management's evident interest in grocery handling was probably the same in all three groups of stores.

The systematic observations of grocery clerks at work, made as part of the study, were likely to make the clerks more aware of how they were doing their job. Clerks had been told that the observations were being made merely to learn how the work was done and that no individual would be evaluated on the basis of the study. This explanation was generally accepted and the clerks were not apprehensive. However, food store employees probably know how to do their assigned tasks more efficiently than they actually perform them. Close scrutiny of their work was likely to make them perform somewhat better than they would have without observation. The effects of the observations were probably the same for all three groups of stores.

The significance of the study lies in the difference in performance between the three groups of stores, rather than in the level of performance obtained in any one store or group. Although the level of performance at which a group of clerks has been operating is likely to affect the amount of improvement after instruction, no group of stores in the study was substantially better than the others on all the criteria used for measuring change. Moreover, before instruction there was little difference between groups of stores on most criteria used.

Table 11.--Correct performances of specified operations by full-time day grocery clerks in 15 supermarkets, during a 6-week period after instruction, 1953

Operation	5 stores with each instruction method											
	Method A				Method B				Method C			
	Observations		Performances		Observations		Performances		Observations		Performances	
	Number	Percent	Actual	Percentage of observations	Number	Percent	Actual	Percentage of observations	Number	Percent	Actual	Percentage of observations
Cutting cases:	30	5	16.7		28	4	14.3		40	13	32.5	
Price marking:												
Positioning cases . .	34	29	85.3		31	24	77.4		53	44	83.0	
Pattern stamping. . .	34	25	73.5		27	19	70.4		52	38	73.1	
Average			79.4				73.9				78.0	
Stocking merchandise:												
Positioning cases . .	63	42	66.7		45	32	71.1		75	46	61.3	
Use of 2 hands. . . .	47	23	48.9		39	13	33.3		74	32	43.2	
Average			57.8				52.2				52.2	
Disposing of cardboard:												
Placing cardboard in box	20	15	75.0		37	25	67.6		40	24	60.0	
Keeping work aisle clear.	20	18	90.0		37	23	62.2		41	35	85.4	
Average			82.5				64.9				72.7	
Total or average of 4 operations 1/ . . .	147		59.1		141		51.3		216		58.8	
Clerks observed	12				13				13			

1/ Total number of observations was obtained by adding the number of observations on cutting cases, positioning cases for price marking and for stocking merchandise, and observations on placing cardboard in a large box to dispose of it. See Appendix for procedures used in making observations, pp. 28-30.

Table 12.--Correct performances of specified operations by night crews in 15 supermarkets during a 4-week period after instruction, 1953 1/

Operation	5 stores with each instruction method									
	Method A			Method B			Method C			
	Correct performances:		Observa-	Correct performances:		Observa-	Correct performances:		Observa-	
	tions	: Actual	: observations:	tions	: Actual	: observations:	tions	: Actual	: observations	Percent of
	Number	Percent	Number	Number	Percent	Number	Number	Percent	Number	Percent
Cutting cases:	143	8	5.6	103	4	3.9	188	81	43.1	
Price marking:										
Positioning cases . .	128	103	80.5	118	86	72.9	211	194	91.9	
Pattern stamping. . .	128	85	66.4	115	73	63.5	203	169	83.3	
Average.			73.4			68.2			87.6	
Stocking merchandise:										
Positioning cases . .	162	86	53.1	147	102	69.4	229	159	69.4	
Use of 2 hands. . . .	157	67	42.7	145	82	56.6	220	129	58.6	
Average.			47.9			63.0			64.0	
Disposing of cardboard:										
Placing cardboard										
in box	83	46	55.4	95	40	42.1	181	166	91.7	
Keeping work aisle										
clear.	86	45	52.3	103	69	67.0	194	189	97.4	
Average.			53.9			54.6			94.6	
Total or average of										
4 operations 2/ . . .	516		45.2	463		47.4	809		72.3	
Clerks observed . . .	9			12			13			

1/ These were full-time clerks who were available for instruction.

2/ Total number of observations was obtained by adding the number of observations on cutting cases, positioning cases for price marking and for stocking merchandise, and observations on placing cardboard in a large box to dispose of it. See Appendix for procedures used in making observations, pp. 28-30.

Table 13.--Correct performances of specified operations by night crews in 15 supermarkets during a 2-week period 3 months after instruction, 1953 1/

Operation	5 stores with each instruction method									
	Method A			Method B			Method C			
	Correct performances		Observa-	Correct performances		Observa-	Correct performances		Observa-	
	tions	: Actual	: Percentage of	tions	: Actual	: Percentage of	tions	: Actual	: Percentage of	
	Number	Percent	observations	Number	Percent	observations	Number	Percent	observations	Percent
Cutting cases:	103	18	17.5	103	2	2.0	17	7	41.2	
Price marking:										
Positioning cases . . .	101	77	76.2	78	58	74.4	20	20	100.0	
Pattern stamping. . .	111	84	75.7	83	50	60.2	18	18	100.0	
Average.			76.0			67.3			100.0	
Stocking merchandise:										
Positioning cases . . .	122	57	46.7	105	66	62.0	28	23	82.1	
Use of 2 hands. . . .	114	89	78.1	100	58	58.0	18	16	88.9	
Average.			62.4			60.4			85.5	
Disposing of cardboard:										
Placing cardboard										
in box	111	73	65.8	60	25	41.7	16	16	100.0	
Keeping work aisle										
clear.	113	71	62.8	71	44	62.0	16	16	100.0	
Average.			64.3			51.8			100.0	
Total or average of										
4 operations 2/. . . .	437		55.0	346		45.4	81		81.7	
Clerks observed	9			12			13			

1/ These were full-time grocery clerks who were available for instruction.

2/ Total number of observations was obtained by adding the number of observations on cutting cases, positioning cases for price marking and for stocking merchandise, and observations on placing cardboard in a large box to dispose of it. See Appendix for procedures used in making observations, pp. 28-30.

Outline of Conference with Grocery Clerks
Used as Part of Instruction Method C

Introduction:

Importance of the work you do:

- To Company X
- To yourselves

Reasons for USDA - and Michigan State - interest in the work.

Nature of USDA study: To help you work smarter, not harder.

By watching the grocery-handling operation at Company X, by talking with you, and by studies in other grocery chains, we've learned a good deal. This meeting is to discuss what we have learned and to get your ideas on further work improvements.

Value of doing the job more easily - more efficiently:

(Ask for reasons for and against doing the work more efficiently. Bring out the following reasons for greater efficiency:)

1. For the group of clerks: Making the job worth more is likely to mean more pay for clerks.
2. For the individual: Every store manager and top executive in Company X was once a grocery clerk. More individual efficiency means greater likelihood of getting ahead.

(Make these points as part of the discussion)

Increased productivity has meant increased pay in the automobile industry. People are often paid for using their minds, not their backs; therefore, work smarter, not harder.

How to do the grocery handling job more easily - more efficiently:

(Use blackboard to list the key points)

1. Good equipment and store facilities.

This is management's job, but they welcome suggestions from you; they will even pay you for ideas; for example, \$300 given two employees for a gadget to make cigarette price marking more efficient. Examples of equipment now in your stores that help make your job easier?

2. Good work methods.

This is your job as well as management's. Everybody gains when better methods of work are used. Here are some ideas to think about while you're working and watching others. These ideas help you see if your work methods are good or can be improved.

- a. Eliminate unnecessary operations; combine operations that can be done together.
Examples?

Receiving merchandise directly onto hand trucks

Leaving loaded trucks in aisles for the night crew

Putting merchandise that is being returned to the backroom onto the hand trucks

- b. Relieve hands of work that can be done by mechanical devices.

Examples?

Conveyor for receiving merchandise in backroom

Hand trucks for carrying merchandise to display shelves

- c. Position things you work with; for example, cases of merchandise to reduce work in stocking shelves. Other examples?

Place for stamp, pad, and cutter

- d. Develop pattern of work that is convenient and comfortable; for example, using two hands in stocking shelves; methods of price marking merchandise. Other examples?

3. Knowledge of good work methods.

Can you recognize good work methods and bad work methods when you see them? We will show some movies we have taken of grocery handling as we have seen it done at Company X. Tell me what you see wrong in current methods and what has been changed in the better work methods.

(Rerun motion picture if necessary to bring out the following points:)

- a. Use a dairy cart to work from in cutting cases and in price marking.
- b. Cut cases of merchandise without turning cases to cut each side.
- c. Follow a fixed pattern in stamping prices on canned goods.
- d. Position cases to make shelf stocking easier:
 - Use dairy cart for upper shelves
 - Use floor for lower shelves
 - Position cases in front of you whenever possible
- e. Use two hands in stocking shelves.
- f. Keep your working aisle free of empty cartons and tops.
- g. Use a board on top of a dairy cart when making price changes.
 - Unload, price change, and restock all units at one time.

Making the workday more interesting:

Have you noticed how some workdays and nights just drag on and others go by quickly and you feel good about them when you get home? If you will recall a good day recently, I think you will find these things happened:

(Discuss these points and seek agreement on them)

- 1. You were busy all day.
- 2. You did some new things or some special things or figured out an easier way of doing a job.
- 3. You thought that some of your co-workers, or even your boss, were pretty good fellows after all. Chances are they said the same things about you that day.

If these things do make up your good workdays, you can make your work more enjoyable every day. What do you think of these suggestions?

(Discuss these ideas and seek agreement on them)

1. Review with your manager all the things that need doing during the entire day. Go over the checklist of things to be done on your job. In this way you can be comfortably busy all day.
2. Think of something new or special that you might do that day in merchandising, better housecleaning, or customer service; or try an easier way of doing an old job.
3. Tell a co-worker, or even your manager, sometime during the day that you think he's okay, that he's doing his job well, that Company X is a pretty good team to work on. Chances are you can honestly say something like that and the somebody you tell it to will meet you half way.

Summary:

(Summarize and seek agreement on action)

What are the three things to make your job easier, more efficient? (Refer to points on blackboard)

Offer suggestions on improving equipment--it will be a credit to your record, a contribution to the progress of Company X, and it will pay you cash.

Practice good work methods--you'll go farther, faster, with less effort.
Work smarter--not harder.

(Cite example of good swimmer and poor swimmer. Distribute memos *Work smarter--not harder* and *There's more to your job*. Ask them to read the material and discuss it with their managers.)

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